DISCOVERY

Analysis of influencing factors of initial public offering underpricing in Indonesia stock exchange

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This article aims to analyze influence factors underpricing of IPO in Indonesian Stock Exchange. Independent variable for which tested in this research is company age, company size, profitability, financial leverage, underwriter reputation, and auditors' reputation. Dependent variable is proxied use initial return. Population in this research is a company that experienced underpricing for years 2012-2017 in BEI. The technique of collection sample using a purposive sampling technique and the criteria which had been determined and produce 91 companies that become the sample. This research is quantitative research based hypothesis test (explanatory research). The method of analysis that used in this research was descriptive and multiple Linear regression analysis. Based on descriptive analysis, the average initial return obtained investors when ipo during the period observations on the 2012-2017 of 43.5%. The results of the analysis regression showed that the company size and underwriter reputation have an influence negative significant impact on initial return. While company age, profitability, financial leverage, and auditors reputations do not affect in significant impact on initial return.

INTRODUCTION

The initial public offering (IPO) is sale of shares for the first time by a company that has just listed Indonesian securities in investors. Another term that is often used is going public. Suyatmin and Sudjadi (2006) state that the problem faced by companies when conducting an initial public offering is the price of the initial offering. In determining the initial offering price there are three possible phenomena that can occur, namely underpricing, overpricing, and neutral (fair price).

Underpricing is a phenomenon if the offer price in the primary market is lower than the price in the secondary market on the first day of trading. In theory, underpricing is interpreted as a positive initial return, overpricing is interpreted as a negative initial return, and if the initial return is zero then the neutral price is reasonable. The initial return is the difference in the offering price in the initial market with the price on the secondary market.

Gumanti (2000) stated that in general companies that conduct IPOs on IDX experience underpricing. If on average the companies that conduct IPO experience underpricing, why is the number of companies that go public more and more from time to time? Nevertheless, why is the phenomenon of underpricing still dominate the domestic and foreign capital markets?.

Table 1 show that the underpricing phenomenon is very dominant in 2012-2017. Of the 144 companies whose IPOs were recorded 123 companies experienced underpricing with a percentage of 85%, 17 companies experienced overpricing at 12%, and 5 companies were neutral or had zero initial returns with a percentage of 3%. In 2012 there were 22 companies conducting IPOs and 91% experiencing

underpricing or as many as 20 companies. In 2013 out of 30 companies that IPO there were 21 companies that were underpricing or 70%. In 2014 83% of companies experienced underpricing from 23 companies that had IPOs. In 2015 88% of the 16 companies that IPO experienced underpricing. In 2016 and 2017 93% and 89% of companies experience underpricing of 15 and 37 companies that are IPOs. Based on the data in table I, it can be concluded that underpricing is inherent in companies conducting IPOs in 2012-2017.

Saputra and Suaryana (2016) stated that the determination of share prices at the time of the IPO was an important factor for issuers and underwriters, because it directly affected the profits to be obtained by the issuer and became a risk that would be borne by the underwriter. The amount of funds to be obtained by the issuer depends on how much the underwriter values the value of the offer. The issuer wants a large profit from its decision to make an initial offer, but the underwriter as underwriter seeks to minimize the risk of not suffering losses due to unsold shares offered. On the other hand the first investor will experience profits if there is underpricing and investors will experience losses if there is overpricing. A condition that is difficult for all three parties, because each wants the benefits of the IPO phenomenon. The three parties determine whether an issuer's decision to do an IPO has underpricing, overpricing, or neutral.

IPO studies show there are many variables that can be associated with underpricing. The two most prominent variables are the reputation of the underwriter and the reputation of the auditor. This was started from Beatty (1989) study which examined auditor reputation as the main variable of his research, and Ritter (1992) who tested the underwriter's reputation as the main variable of his research. The results of their research indicate that the auditor's reputation and reputation of the underwriter affect underpricing. Carter and Manaster (1990) revealed

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that the underwriter's reputation can be used as a signal in reading the phenomenon of underpricing. The signal can be seen when the higher the reputation of the underwriter, the lower the level of underpricing. Vice versa, the lower the underwriter's reputation will cause the higher the level of underpricing. This turned out to be in line with the reputation of the auditor. How et al (1995) support the signal theory regarding the higher the auditor's reputation, the lower the risk of underpricing. Auditor quality is a deduction from underpricing uncertainty (Beatty, 1989).

Table 1 IPO phenomena in 2012-2017 on the IDX

Year	Σ IPO	Σ U	Σ O	Σ N	% U	% O	% N
2012	22	20	1	1	91%	5%	5%
2013	30	21	7	2	70%	23%	7%
2014	24	20	3	1	83%	13%	4%
Year	Σ IPO	Σ U	Σ O	Σ N	% U	% O	% N
2015	16	14	1	1	88%	6%	6%
2016	15	14	1	0	93%	7%	0%
2017	37	33	4	0	89%	11%	0%
Year	144	123	17	5	85%	12	3

Another factor that is often used by domestic and foreign researchers as a research variable is profitability and financial leverage. Both are two important measuring tools that are not left behind if we want to assess the good and bad performance of the company. Profit and financial leverage are two indicators that are often used by investors to assess companies that are IPOs. Profitability is an important consideration for investors because it is a reflection of the company in making a profit. A company with a high profitability ratio will be targeted by investors as its investment choice. So that in turn high profitability will reduce the possibility of underpricing. While financial leverage is a benchmark from the other side of the company. If profitability reflects the ability of the company to obtain its profits, financial leverage reflects whether from the profits of the company, the company has a large dependence on sources of capital from outside. Because each company has a majority of debt, the portion of this debt becomes very important for investment considerations. Investors tend to choose companies with small debt ratios, because the greater the debt ratio, the greater the risk of the company's failure to repay the loan or debt.

Another factor that is also often used by researchers to test underpricing is the age and size of the company. Long-standing companies tend to be more trusted by investors than companies that have just stood. Yasa (2002) through the signaling model suggests that the longer the company stands, the more it reduces the possibility of underpricing. The same thing applies to the size of the company, the greater the size of the company the more trusted the investor. For investors, large companies are considered to have more certainty than small companies. In addition, large companies have more information that can be accessed by investors so that it can reduce information asymmetry and ultimately reduce the possibility of underpricing.

Several previous studies have shown mixed results regarding factors that influence underpricing on IPOs. Beatty (1989) suggests that there is a significant relationship between auditor reputation, underwriter reputation, company age, and underwriter contract type with initial return. Carter and Manaster (1990) suggest that the reputation of underwriters, share insiders, offering shares, and company age, has a

significant negative effect on initial return. Kim et al. (1993) suggested that financial leverage and ownership retention had a significant positive effect on initial returns, while investment, ROA, underwriter reputation, and gross proceeds had a negative effect on initial return. Research conducted by How et al. (1995) showed that the underwriter's reputation, number of shares offered, listing time, and company age had a significant negative effect on initial return. Islam et al. (2010) suggested that company age and size had a positive significant effect on initial return. While the number of shares offered and type of industry has a significant negative effect on initial return.

The rapid development of socio-economic and technological issues caused inconsistencies in the results of the research. Therefore, the main problem in this study is whether company age, company size, profitability, financial leverage, underwriter reputation, and auditor reputation affect underpricing. The purpose of this study was to examine and obtain empirical evidence the influence of company age, company size, profitability, financial leverage, underwriter reputation, and auditor reputation on underpricing.

METHOD
Research Design
This research is a quantitative research based on hypothesis testing (Explanatory Research) in companies that conduct IPOs on the IDX in the period 2012-2017 by using the Multiple Linear Regression method to compare the influence of company age factors, company size, profitability (ROA), financial leverage (DER), the reputation of the underwriter, and the reputation of the auditor on the level of underpricing of companies listed on the IDX.

Sample and Data Sources
The types of data in this study are quantitative data. Quantitative data includes reports on the balance sheet, income statement, cash flow statement, statement of changes in capital, and age of the company. The data used in this study is in the prospectus published by the company before conducting an IPO.

The data source in this study is secondary data. Most of the data was obtained from the website of The Indonesia Capital Market Institute (ticmi.co.id) and some parts came from idx.co.id, idnfinancials.com, Sahamok.com, yahoofinance.com, britamafinance.com, and other mass media contains financial data.

The population in this study was companies that conducted IPOs for the period 2012-2017. The total population of this study was 144 companies and the number of samples was 118 companies.

Data Analysis Method
The variables studied include the dependent and independent variables. The dependent variable studied is underpricing which is proxied by initial return. The independent variable is the age of the company, the size of the company is proxied using the natural logarithm of total assets, profitability is proxied by return on assets, financial leverage is proxied by the debt to equity ratio, reputation of the underwriter, and reputation of the auditor.

The data analysis method used is multiple linear regression analysis with the following equation:

$$UP_{it} = a + b_1 AGE_{it-1} + b_2 SIZE_{it-1} + b_3 ROA_{it-1} + b_4 DER_{it-1} + b_5 UND_{it-1} + b_6 AUD_{it-1} + e_i$$

The t test is used to test the significance of the independent varaibel influence (company age, company size, profitability, financial leverage, underwriter reputation, and auditor reputation) partially against underpricing.

Table 2 Results of Descriptive Statistics Variable Analysis

Variable	N	Range	Min	Max	Mean	Std.D	Var
IR	118	10.5	0.01	10.6	0.43	1.02	1.05
AGE	118	63.4	1.4	64.8	19.5	13.6	185
SIZE	118	8.8	21.9	30.8	2.74	1.33	1.77
ROA	118	0.7	-0.2	0.5	0.05	0.08	0.07
DER	118	32	0.03	32	2.7	3.68	13.5
UND	118	1	0	1	0	-	-
AUD	118	1	0	1	0	-	-

Results and Discussion Analysis

The description of the level of underpricing, company age, company size, profitability, financial leverage, underwriter reputation, and auditor reputation are presented in Table 2.

The average company conducting an IPO in 2012-2017 experienced underpricing with an initial return of 43%. With a standard deviation of 102%, it means that the distribution of data is very heterogeneous, individual data points are far from the average value.

In general, the average age of the company is 19.5 years, total assets are 2.74 (converted into natural logarithms), profit ratio of total assets is 5%, debt to equity ratio is 270%, reputation of non-Top Five underwriters and reputation non-Big Four auditors. The standard deviation value of the variables AGE, SIZE, ROA, and DER is relatively high if the distribution of data is quite heterogeneous or the data point is quite far from the average value. While the UND and AUD variables are dummy variables, the distribution of data tends to be homogeneous.

RESULT

Normality Test Results Data shows that the research variable is not normally distributed so steps are taken to improve the data to meet the level of significance that has been set. The first is to remove extreme data (outliers). But after the extreme data disposal is done, the variable is still not normally distributed, so the second step is done, the data is converted into natural logarithms. The result is that some variables are normally distributed and have met the standards for the next stage, namely Multiple Linear Regression Analysis.

Table 3 Results of Multiple Linear Regression Analysis

Model	Unstandarized Coefficients		Standarized Coefficients	t	Sig.
	B	Std.Err	Beta		
(Constant)	7.657	3.927		1.950	0.055
ln(AGE)	-0.079	0.169	-0.045	-0.464	0.644
ln(SIZE)	-0.317	0.143	-0.235	-2.220	0.029
ln(ROA)	0.039	0.096	0.044	0.406	0.686
ln(DER)	-0.069	0.126	-0.059	-0.544	0.588
ln(UND)	-0.794	0.303	-0.277	-2.624	0.010
ln(AUD)	-0.513	0.383	-0.134	-1.339	0.184

The results of Multiple Linear Regression Analysis and the equations are as follows (Table 3):

$$\ln(IR)_i = 7{,}657 - 0{,}079 \ln(AGE)_{It\text{-}1} - 0{,}317 \ln(SIZE)_{It\text{-}1} - 0{,}039 \ln(ROA)_{It\text{-}1} - 0{,}069 \ln(DER)_{It\text{-}1} - 0{,}794 \ln(UND)_{It\text{-}1} - 0{,}513 \ln(AUD)_{It\text{-}1} - e_{It}$$

Info: significant at $\alpha = 5\%$

DISCUSSION

Company Age Influence against Underpricing

The results showed that the age of the company did not significantly influence underpricing. This means that the higher / lower age of the company in the period (t-1) is not able to explain the level of underpricing in the period (t). The factors that cause the age of the company do not have a significant effect on underpricing. The first is that there is no consistency in the influence of company age on initial return. There are companies with a relatively old age but have a positive initial return (underpricing) and there are companies that are relatively young but have an initial return (overpricing). Second, companies tend to be late in conducting IPOs. Many companies are old but have just registered their names on the IDX during the observation period. Third, the development of technology is so rapid, but not evenly followed by companies. Technology makes a newly established company able to compete in balance with companies that have long been established. Technology makes the age of the company not seen as a crucial indicator in assessing investment decisions.

Effect of Company Size on Underpricing

The results of the study show that the size of the company has a significant negative effect on underpricing. This means that the higher the company in the period (t-1) is able to explain the level of underpricing in the period (t). These results can be interpreted if the smaller the company can cause the greater the opportunity for underpricing and vice versa, if the greater the age of the company it can lead to smaller opportunities to increase underpricing. Yasa (2002) states that the company is bigger, the community believes more and makes this company the right place to invest.

Effect of Profitability on Underpricing

The results showed that profitability did not have a significant effect on underpricing. This means that the higher / lower profitability in the period (t-1) is not able to explain the level of underpricing in the period (t). The factors that cause profitability do not have a significant effect on underpricing is the action of investors who tend to see profitability as "leave a good taste", which means investors see profitability as "delicious food" which ultimately causes investors to increase the demand for shares and in turn causes underpricing.

The Effect of Financial Leverage on Underpricing

The results of the study show that financial leverage has no significant effect on underpricing. This means that the higher / lower financial leverage in the period (t-1) is not able to explain the level of underpricing in the period (t). The factor that causes financial leverage does not have a significant effect on underpricing is the action of investors who tend to take action as a risk averse. Financial leverage is a proxy for company risk. The higher the financial leverage ratio shows the higher the risk of corporate failure due to being unable to pay the debt. There is a fixed burden of the high debt ratio, namely interest. The

high interest expense causes the company's priority in allocating profits to pay off debt and that is not liked by investors, where they want the distribution of revenue through dividends.

Effect of Underwriter's Reputation on Underpricing

The results showed that the underwriter's reputation had a significant negative effect on underpricing. This means that the better / less good reputation of the underwriter in the period (t-1) is able to explain the level of underpricing in the period (t). These results can be interpreted if the better the underwriter's reputation can cause the less chance of underpricing and vice versa, if the underwriter's reputation is not good, then the opportunity for underpricing will increase. Beatty (1989) states that good quality underwriters will produce better information for investors in interpreting the value of companies that will conduct IPOs. This is in accordance with the theory of "banker's monopsony power hypothesis" theory proposed by Baron (1982) which states that underpricing occurs because of information asymmetry. It is suspected that the underwriter used the excess quality to underprice an IPO.

Effects of Auditor Reputation on Underpricing

The results of the study indicate that the auditor's reputation does not significantly influence underpricing. This means that the better / less good reputation of the auditor in the period (t-1) is not able to explain the level of underpricing in the period (t). Factors that cause auditor reputation do not have a significant effect on underpricing are issuers tend to use auditors with medium or mediocre reputation to minimize audit costs. Issuers understand if the auditor is not the party that directly determines the stock price, but only the party used to "beautify" the prospectus report which generally aims to create a good image among the public and especially attract investors in the capital market. Even so, not all investors consider the auditor's reputation as an important variable in making investment decisions.

CONCLUSION

Based on the results of the analysis that has been done, it is obtained that of the six independent variables used, namely company age, company size, profitability, financial leverage, underwriter reputation, and auditor reputation, there are two independent variables that have a significant negative effect on underpricing, namely company size and underwriter reputation. Whereas company age, profitability, financial leverage, and auditor reputation have no significant effect on underpricing.

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General Note

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